

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 7, line 27, with the following paragraph:

--Figures 3A-3B show the Lrp5 gene sequence (SEQ ID NO:1, continued from Figure 3A to 3B) and the Figure 3A-3C shows design of the targeting construct used to disrupt Lrp5 genes. Figure 3C shows the sequences identified as SEQ ID NO:3 and SEQ ID NO:4, which were used as the targeting arms (homologous sequences) in the Lrp5 targeting construct.--

Please replace the text at page 50, lines 17-30 with the following paragraphs:

--*Phenotypic Analysis.* The transgenic mice were analyzed for phenotypic changes. The homozygous mice demonstrated eye abnormalities, including retinal degeneration ~~regeneration~~.

Specifically, histopathology studies demonstrated that the eyes of the homozygous mice suffered from retinal degeneration, including bilateral retinal degeneration ~~regeneration~~. In each homozygous mutant, at least one of the following retinal changes were present: retinal folds; thinning and vacuolation of the pigment epithelium layer; degeneration of photoreceptors; thinning, disorganization, and pyknosis of the outer nuclear layer; thinning and disorganization of the outer plexiform layer, including juxtaposition of the photoreceptor nuclei and the bipolar cell or inner nuclear layer; disorganization of the inner nuclear layer; thinning of the inner plexiform layer; loss of ganglion cell nuclei, especially large ganglion cells; and, gliosis of the nerve fiber layer. The changes were generally more prominent in the outer layers of the retina (photoreceptor layers) and least pronounced in the inner layers (inner nuclear layer, inner plexiform layer, ganglion cell layer, and nerve fiber layer).--